

UNIVERSITY OF CALIFORNIA

COOPERATIVE EXTENSION—CONTRA COSTA COUNTY

I. DEPARTMENT MISSION AND PROGRAM AREA GOALS

The mission of Cooperative Extension is to serve California through the creation, development and application of knowledge in agriculture, natural and human resources. In Contra Costa, we help people solve local problems by applying scientific, research-based information to everyday problems.

Our University of California (U.C.) Advisors work in specific program areas to achieve:

1. An increase in the percentage of participants in workshops who report a useful gain in knowledge as a result of information presented to them.
2. A high percentage of participants who report a change in positive behavior as a result of participation in our educational programs.

II. MAJOR PROGRAM AREAS

A. AGRICULTURE PROGRAM AREA

The Agriculture Program helps local farmers establish and maintain healthy and productive food systems. Our Farm Advisor provides information through personal consultations with growers, workshops, newsletters, and other publications. She also conducts research to solve local farming problems and issues. The program emphasizes the reduction of pesticide use, the resolution of agriculture/urban development conflicts, farm worker safety, the adoption of new crops and varieties and other activities, which sustain and protect our food supply, the environment and county residents.

This program collaborates with individuals and local entities such as the CCC Dept of Agriculture, the CCC IPM Task Force, the CCC Agriculture Advisory Committee (vice-chair), Agricultural Enterprise Task Force – East Bay Counties, the CCC Farm Bureau, Community Alliance with Family Farmers, Ca. Certified Organic Farmers, and other groups to provide information and help to solve local agricultural problems.

Goal 1: To provide information to new and established farmers promoting environmentally friendly and economically sound farming practices in Contra Costa County.

Goal 2: Reduce the use of toxic pesticides used on local farms.

Budget: \$48,548

U.C. ALLOCATED FTE: 1.0

B. YOUTH PROGRAM AREA

The youth development program in Contra Costa consists of education and technical support in topic areas such as how to understand and effectively communicate with youth, teaching strategies, and activities to use with youth. The primary audience includes agency staff, parents, teachers, and adult and teen volunteers.

Direct service programs for youth include the 4-H Club Program (youth 5-19 years of age), the Youth Food Stamp Nutrition Education Program (low-income youth 4-18) and the Countywide Youth Commission (youth 12-18 years).

Additionally, the youth development program includes research projects that yield information to help everyone better understand the developmental needs of children and youth and how to more effectively work with youth.

Budget: \$81,348
U.C. ALLOCATED FTE: 1.6

C. NUTRITION AND CONSUMER SCIENCE PROGRAM AREA

The adult nutrition program brings University resources and research-based information to bear on local food and nutrition problems. We provide client education and staff training that enable Contra Costa families to make food choices which promote good health and wise use of resources. Our consumer economics program brings practical work force readiness skills for Employment and Human Services' Job Club and General Assistance clients.

Goals:

1. Reach 100 families with practical nutrition education through the Expanded Food and Nutrition Education Program (EFNEP) with six hours of instruction.
2. Reach 100 Food Stamp recipients with four to six hours of practical nutrition education through Food Stamp Nutrition Education Program (FSNEP).
3. Train General Assistance (GA) Program staff members in the use of "Gateway to a Better Life" life skills curriculum.
4. Mentor GA program staff in their delivery of "Gateway" with their clients.

Budget: \$48,548
U.C. ALLOCATED FTE: 2.6

D. URBAN HORTICULTURE, MASTER GARDENER & ENVIRONMENTAL EDUCATION PROGRAM AREA

The Urban Horticulture and Master Gardener Program Area provides citizens, landscape and nursery business people, schools, public land managers and home gardeners current information about integrated pest management (IPM), non-point pollution reduction, invasive plants, green waste reduction, the urban forest/residential interface and the selection and care of horticultural plants. Master Gardeners, trained by University of California researchers, provide horticulture outreach to residents throughout Contra Costa County. Master Gardeners also staff the gardening information phone “hotline” and the walk-in clinic, maintain the web-site and the speaker’s bureau and provide expertise to many community garden projects.

In June of 2002, the pathogen that causes Sudden Oak Death was found at several sites in Contra Costa County. The Urban Horticulture Program Leader gave five public education seminars for city arborists, park managers and homeowners.

Goal 1: To increase the number of program participants who understand how IPM can reduce the use of pesticides and maintain a healthy environment.

Goal 2: To create an awareness of how invasive pests can be detrimental to our environment and how actions can be taken to mitigate their impact.

The Environmental Education Program focused on two areas: Integrated Pest Management and Plant Biotechnology Issues Education.

Goal 1: To work collaboratively with county departments to develop a County IPM Policy.

Goal 2: To provide educational programs on plant biotechnology increasing awareness of the science and issues of the technology.

Budget: \$48,548

U.C. ALLOCATED FTE: 1.2

E. EMPLOYEE PROFILE

The Department Head (County Director in the UC system) provides program planning leadership, staff supervision and development, grant facilitation, budget development, personnel and office policy oversight, and computer support. Administrative support staff provides personnel, payroll and fiscal administration, clerical supervision, and volunteer system support. Different personnel, administrative and financial policies

of the UC system, Contra Costa County, USDA, and our Grant Providers gives us a challenge to administer.

ALLOCATED STAFF POSITIONS-Housed at Contra Costa County

CLASSIFICATION	ALLOCATED POSITIONS	
	University of Ca.	COUNTY
County Director	1.0	
Advisors	3.0	
Program Representatives	4.15	
EFNEP/FSNEP Office Assistant	0.8	
Office Manager		1.0
Office Assistants		2.0

Three shared UC staff; Three UC State staff housed at Forest Products Lab in Richmond.

EMPLOYEE PROFILE*

ETHNICITY	MALE	FEMALE	TOTAL	PERCENT
Caucasian	1	9	10	77
Latino		2	2	15
African-American		1	1	8
Asian				
Native American				
TOTAL	1	12	13	
PERCENT	8	92		100

*Does not include short-term grant or contract positions or UC Advisors that work in CCC but housed in adjoining offices or are Statewide advisors housed at Forest Products Lab.

III. DEPARTMENT ACCOMPLISHMENTS

A. AGRICULTURE PROGRAM AREA

The number of requests for information by farmers and prospective farmers continues to grow. Attendance at Cooperative Extension classes, meetings and workshops is high. Our Farm Advisor sponsored or participated in 16 workshops attended by 2,639 individuals, provided 413 personal consultations and published 13 newsletters making 3,006 contacts with local growers.

Six of these workshops were pesticide safety training sessions that had 184 participants. Workshops were given in Spanish for Hispanic farm workers. These were conducted jointly with the CCC Agriculture Department.

Forty percent of apple and pear orchards in the County have adopted the “Reduced Risk” pest management practices promoted by our demonstration project from 1999-2002. This program was supported by grants from the CA Department of Pesticide Regulation (\$120,000) and the University of CA Sustainable Agriculture Research and Education Program (\$175,000). Eighty-six percent of pest management materials used in the demonstration orchards were very safe “reduced risk” products like oil and mating disruption. The use of more toxic pesticides was reduced by 39% over the course of the four-year project.

Twelve additional projects were conducted promoting sustainable agricultural systems in Contra Costa County.

The Ag program used volunteers to assist with the Cherry Buckskin survey, assuring that this deadly disease does not get established in this County. Ten volunteers spent 172 hours on this project.

B. YOUTH PROGRAM AREA

The Community and Youth Development Advisor, in collaboration with numerous County and community staff, offered workshops on topics such as managing groups of kids, working with teen volunteers, service learning and effective parenting.

Over 1,000 youth-serving professionals, volunteers, parenting educators and teens received education via workshops, conferences, publications and other delivery methods.

The Youth FSNEP Program Representative delivered her nutrition program to 55 classroom teachers in low-income schools. The program reached a total of 2,626 children, 1,784 of whom belong to food stamp eligible families.

The 4-H program, which includes clubs and groups, was delivered via adult volunteers and trained extenders to 2,444 youth.

The 4-H Club program and CYC utilized 337 adult volunteers to deliver programs and/or provide assistance to staff delivering programs. For the two programs, volunteers donated a total of 2,988 hours.

The Community and Youth Development Advisor reported program participation from all parts of the County and included a representative number of minority participants.

C. NUTRITION AND CONSUMER SCIENCE PROGRAM AREA

In both the EFNEP and FSNEP programs, we teach nutrition to a variety of groups, such as substance abuse recovery programs, public school sponsored parent groups, English as a second language classes, pregnant teen program and Employment and Human Services Department Job Club and General Assistance programs. We find that these participants are at a “teachable moment” where their receptivity to our programs is enhanced by the larger context of the cooperative agency program.

Participation and ethnic breakdown of nutrition program graduates:

	White	Black	Native American	Hispanic	Asian or Pacific Island	Total
Number of participants	96	224	11	239	27	597
Percent of participants	16%	38%	1%	40%	5%	100%

We have nutrition education instruction participants from every district in Contra Costa County.

Food Safety volunteers included teachers, 4-H volunteers, organization volunteers and other agency staff who take time to assemble clients, do training as they were trained and support our teaching. Volunteers contributed 60 hours of time.

D. URBAN HORTICULTURE, MASTER GARDENER & ENVIRONMENTAL EDUCATION PROGRAM AREA

One hundred thirty-seven certified Master Gardeners provided assistance to the people of Contra Costa County. UC Master Gardeners have passed 18 weeks of basic training and a final exam to become certified. In addition, advanced training is provided in areas of interest to further each volunteer’s education.

One hundred percent of the initial and advanced Master Gardeners participating in training programs reported they received useful, new information.

A survey of the participants who made calls to the Master Gardener Hot Line (925-646-6586) indicated they were served well with useful information. The Hot Line volunteers answered over 700 requests for gardening assistance. Calls include requests for information on pest management, less toxic pesticides, plant growth and identification, and plant production practices.

The Master Gardener Web-Site (<http://ccmg.ucdavis.edu/home.htm>) is averaging over 6000 hits per month. This is an increase of over 1000 calls per month from the previous year. The weekly Master Gardener articles and articles written with specific gardening concerns relevant to the County are searchable on this site.

Sampling at Sudden Oak Death (SOD) investigative sites in Contra Costa County resulted in a positive diagnosis by the CDFA lab in Sacramento. An educational program was developed and delivered to public land managers, parks personnel, landscape and green industry personnel and individuals. Collaborative planning with the County Agriculture Department, Regional Parks, Waste Management and other policy/enforcement personnel was done to address how to minimize the spread of the disease. Current inquiries from concerned homeowners and businesspersons are answered as they arise.

The Master Gardener/Urban Horticulture program is in the fifth year of a successful partnership with Central Contra Costa Sanitary District focusing on IPM. Volunteers who had received advanced training, gave fourteen free workshops titled, "Gardening the Less Toxic Way," reaching over 249 residents. The IPM information was promoted at community gardens, farmers markets, flower shows and plant sales. Testing results for 2002, reported by Central Contra Costa Sanitary District, indicated a continued drop in Diazinon, one of the primary identified pollutants, and a slight increase in Chlorpyrifos.

The Environmental Education program achieved positive results in both of the primary goals. Collaboration with other County departments on the IPM Policy Committee has resulted in significant work being completed on an IPM Policy recommendation for BOS approval.

An educational program on Plant Biotechnology has been developed and delivered in Contra Costa County. It is available for schools and organizations. Most Frequently Asked Questions can be accessed on the Contra Costa-UC Cooperative Extension Web site.

Cooperative Partners with our Horticulture / Master Gardener Program:

East Bay Regional Parks	Mt. Diablo State Park
East Bay Mun. Util. District	Farm Bureau
C.C.C. Dept. of Agriculture	Bancroft Gardens
Diablo Valley Junior College	Elementary Schools
Central Sanitary Supply	Retain Nurseries
Markham Arboretum	Heather Farms
Tilden Botanical Garden	Waste Management
Contra Costa Times	Muir House
Forest Products Lab	Project Learning Tree
Food Land and People	Beekeepers Association
California Rare Fruit Growers	International Society of Arborists
Contra Costa Water District	Richmond & Orinda Farmers Markets
S. F. Flower and Garden Show	

E. FINANCIAL RESOURCES [GRANTS (G); FEDERAL/STATE (F/S); OTHER (O)]

	2001	2002
AGRICULTURE:		
U. C. Sustainable Agriculture Research and Education Program (G)	\$7,500	\$60,820
Monitoring Companies (G)	62,000	3,700
Pest Management Companies (G)	0	2,000
Tomato seed Companies (G)	3,370	2,170
<i>Sub-total</i>	<i>\$72,870</i>	<i>\$68,690</i>
YOUTH:		
Five a Day (G)	6,600	6,600
Workshop fees (G)	0	2,960.
Youth in Public Policy Decision Making (research) (G)	0	10,000
Public Policy Institute (G)	600	500
Civic Engagement Research (G)	3,000	3,000
Youth FSNEP (F/S)	53,194	55,000
One Book at a Time	7,000	0
<i>Sub-total</i>	<i>\$63,794</i>	<i>\$78,060</i>
	2001	2002
NUTRITION:		
Anonymous donor for anemia research (G)	0	31,000
U.C. Work group monies (G)	0	7,400
Adult EFNEP (F/S)	61,436	61,436
Adult FSNEP (F/S)	99,832	129,848
<i>Sub-total</i>	<i>\$161,268</i>	<i>\$229,684</i>
HORTICULTURE/ENVIRONMENTAL EDUCATION		
UC special program grant (F/S)		\$15,180
Environmental Education (O)		300
<i>Sub-total</i>		<i>\$15,480</i>
TOTAL GRANTS =	\$374,932	\$391,914

Total Budget resources of \$1,432,640 were available from all sources including: (1) the State of California through the University of California; (2) the Federal Budget through USDA and UC; and (3) Contra Costa County. Budget resources of \$226,994 were from the County Budget, which equals about 20% of the total from government. Eighty percent of the funding for the Cooperative Extension budget in Contra Costa County is from State and Federal sources. Grants funds are not included in these figures. Competitive Grants are based upon the Advisor's ability to secure and the time available to compete. They equal \$391,914 in addition to resources supplied by County, State or Federal budgets. Volunteers contributed over \$800,666 worth of volunteer time.

IV. DEPARTMENT CHALLENGES

A. INTERNAL TO THE DEPARTMENT

Cooperative Extension is a partnership of the County, State and Federal government. Multiple funding sources provide Contra Costa County with enriched educational programs, research and outreach. Grants also add to resources for Contra Costa County. Administrative responsibility is complex for such a small office but understandable due to the multiple funding sources, reporting requirements, personnel and finance policies and procedures that are different for each partner.

Cooperative Extension expands educational outreach and research by using large numbers of volunteers. All our volunteers receive a background investigation, extensive education and periodic in-service in order to be an official UC volunteer. Volunteers require support and supervision. We have difficulty giving as much support as the volunteers could use due to our staffing challenge.

The department needs a youth coordinator position to give support to the volunteers in the youth programs such as 4-H. Having a staff position to do program management and volunteer coordination and service work would help in youth and family recruitment, volunteer support, and youth mentoring. Closer supervision of the volunteers would also provide for greater risk management.

Our Urban Horticulture/M.G. Coordinator position is funded by state funding at 75% FTE. A full-time position is more reasonable to meet service demands. Temporary funding was secured this past year to increase the position to full-time, but that source is no longer available. Invasive pests such as SOD will continue to put pressure on staff and program resources. Attention to pest management education definitely affected the time available for educational programs. We also have a problem supervising the volunteers with the limited time available of a 75% position. We have one of the finest Master Gardener programs in the state that is in jeopardy if we cannot find funding to cover the other 25%.

In-service education is a fundamental part of the Extension mission to bring research-based information to bear on a problem. The portion of in-service funding from County sources has declined to a point where most of what is left is now a function of State or grant resources. The quality of the resources Advisors bring to the County is going to be reflected in our investment in their in-service.

B. EXTERNAL TO THE DEPARTMENT

The diversity of Agriculture production and the Urban/Ag interface issues put high demands on our staff resources. The professional competence and successful program offering of our Farm Advisor promotes increasing requests for her to serve on advisory committees, planning groups and conduct more research about local agricultural problems. Since we have fewer farms and farmers than some other parts of the state, we must rely upon securing help from cross-county UC staff. Cooperation with the County Agriculture Department has been very good and mutually beneficial.

We could utilize additional UC Nutrition Educators. The public need is present and the past success of the programs to change bad nutrition behavior and prevent larger problems in the clientele is well-documented. This is a competitive situation between California counties for placement-we can only be diligent and keep applying. Cooperation with EHS and Health Departments has been good for both departments and helped to serve our citizens.

Our collaborative work with the water districts, the clean water program and County Public Works Department indicates the addition of a UC Watershed Advisor with his/her technical expertise would be very complementary to our current efforts. Funding is the only deterrent. We were almost successful in securing a position this last year before positions were frozen due to the state budget crisis. Our Urban Horticulture Program Rep. and Environmental Education Advisor are trying to fill some of the gap.

V. PERFORMANCE INDICATORS

A. SERVICE DEMAND/WORKLOAD

Number of Clients Reached, Volunteers Used by Program Area and Method:

Program Area					
METHOD	Ag	Youth	Nutrition	Urban Hort. Environmental Education	Client Contacts TOTAL
Meeting/Workshop Participants	2,639	2,206	706	1,746	7,297
Multi-session Class Participants	N/A	N/A	N/A	48	48
Personal Consultations E-mail, Postal, Phone	413	550	120	1560	2,653
4-H Club Adult Volunteers	N/A	284	N/A	N/A	284
4-H Club Members	N/A	611	N/A	N/A	611
Youth Group Participants	N/A	4,200	N/A	N/A	4,200
Extenders, Trained to Teach	0	996	109	480	1,585
Newsletters – Distributed	3,006	750	0	300	4056
Website Hits	0	3,000	0	48,000	51,000
Total Clientele Contacts	6,058	12,597	935	52,086	71,676
Volunteers' Hours and un-paid value	538	Adult 40,026 CYC 400 Total 40,426	100	6,400	47,098 hrs x \$17/hr= \$800,666
In-Service Funding	UC-\$2,661 CCC-0	UC-\$2,000 CCC-0	UC-\$2,870 CCC-0	UC-\$3,500 CCC-\$500	UC-\$11,031 CCC-\$500

SERVICE DEMAND:

The number of persons reached with educational programs this past year was 20,676. Additionally, we had over 50,000 website hits. Technology helps us to disseminate some of the information, but does not help clientele with application of the information. We still consider it important that Cooperative Extension staff help clients to **apply** this information in solving their own problems.

B. AGRICULTURE PERFORMANCE TARGETS AND INDICATORS

Objective is to change behavior of producers to use less toxic pesticides. Research plots demonstrate the alternative products affecting selection by producers in future years. Figures 1 and 2 show the change in pattern of use.

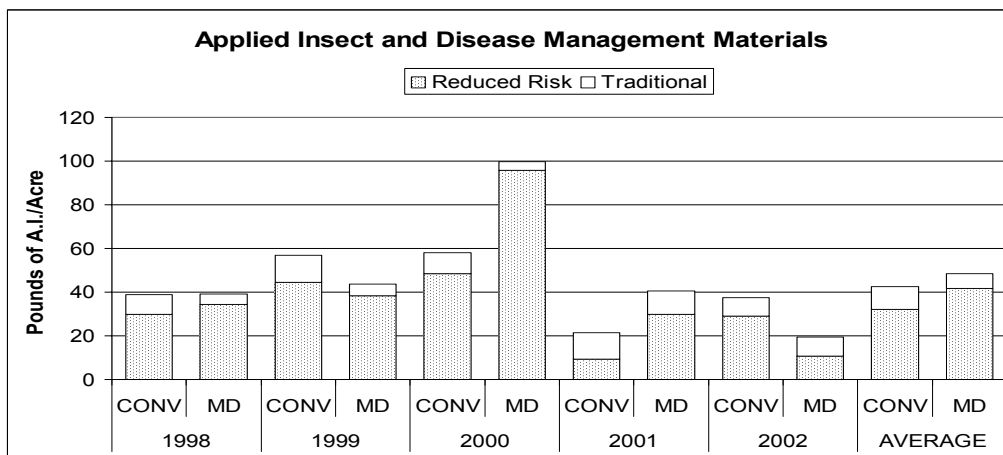


Figure 1: Seventy-five percent of pesticides used in our conventional apple and pear orchards (CONV) over the last five years were very safe “reduced risk” materials like oil and soap. Eighty six percent of the pesticides used in our mating disruption (MD) demonstration orchards were reduced risk materials

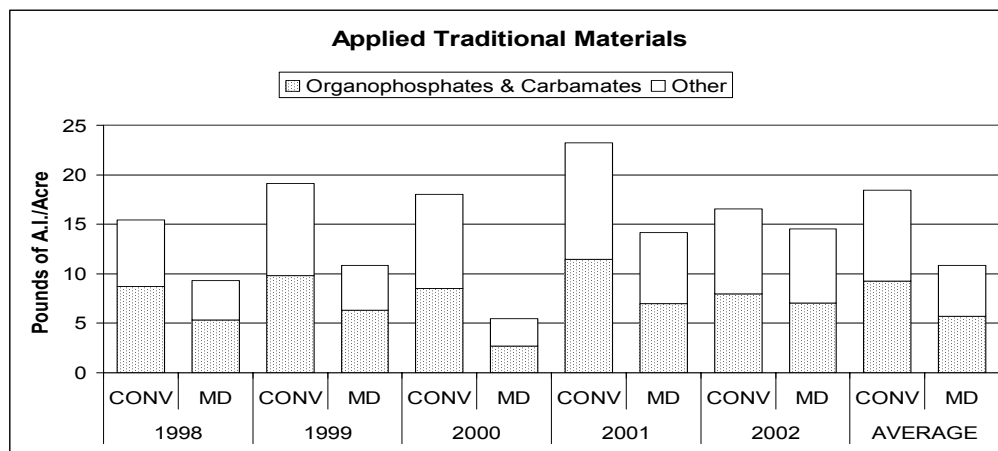


Figure 2: The use of more toxic traditional pesticides like organophosphates and carbamates were reduced by 39% in our reduced risk Mating Disruption (MD) demonstration orchards over the last 5 years in comparison with the conventional (CONV) orchards.

C. YOUTH PROGRAM TARGETS AND INDICATORS

Evaluation data specific to each workshop delivered by the Advisor was collected. Data showed knowledge gains of participants for every workshop the Advisor conducted. For example, data collected from a service-learning workshop showed that of the 24 participants, 24 (100%) showed growth in at least one area and 18 (75%) improved in all five of the following areas: 1) know the difference between service-learning and community service; 2) know five elements of high quality programs; 3) have ideas how to increase the educational value of a project; 4) have ideas how to increase the service value of a project; 5) have a rough plan for beginning a project.

Ninety-four percent of participants in all workshops rated overall workshop quality at “4” or “5” on a 5-point scale with a positive gain in knowledge.

TARGET: The State Youth FSNEP program has designated 40 teacher extenders as the official benchmark goal (‘Train the Trainer’ Model).

INDICATOR: Contra Costa taught 55 teachers who were able to use their knowledge in a classroom, a 40% increase over the benchmark goal.

TARGET: To increase the participation of youth in the County 4-H Club program.

INDICATOR: Enrollment lags considerably behind neighboring counties of Solano and Alameda, both of whom employ a county-paid staff person to recruit participants and manage the clubs.

OUTCOMES:

Research shows that participation in positive youth development opportunities reduces participation in risky behaviors including vandalism, truancy, and unintended pregnancies by youth. Similarly, improved nutrition behaviors by youth will increase their ability to learn in school and reduce their risk of chronic disease as adults.

D. NUTRITION PROGRAM TARGETS AND INDICATORS

TARGET: EFNEP clients will produce at least 85% improvement in their reported dietary practices showing a positive change in behavior. This will also indicate a positive knowledge gain from participation in nutrition classes and workshops.

INDICATOR: For the last program year we documented that 95.3% of our EFNEP graduates improved on their 24-hour food recall scores. Improvement means that they either increased their intake from food groups found lacking and/or decreased their consumption from food groups where they were consuming above the recommended number of servings.

TARGET: Food Behavior Checklist evaluation from FSNEP (at least 50% of the participants improving their food label reading practices) has been shown to be a leading indicator for other positive nutrition-related behaviors.

INDICATOR: For the last program year we documented that 68% of FSNEP graduates improved their frequency of reading labels.

NUTRITION PROGRAM INDICATORS		
	2001	2002
EFNEP Graduates – Food Recall	90.4%	95.3%
FSNEP Label Reading Practice	66%	68%

TARGET: To increase the skill level of clients in budget management.

INDICATOR: Pre and post testing of General Assistance staff and clients show an improvement in work-related skills to help clients manage their personal and family resources. A new method of measurement is being developed to more accurately assess long-term improvement.

NUTRITION PROGRAM BENCHMARK COMPARISON:

Average Scores of Nutrition Program Participants in nutrition indicators and three food safety indicators for three Bay Area Counties:

Contra Costa County	42
Alameda County	55
Santa Clara County	27

Contra Costa Cooperative Extension compared very favorably with other counties using the data reported by the State U.C. Nutrition Summary Report.

E. HORTICULTURE, MASTER GARDENER, ENVIRONMENTAL EDUCATION PROGRAM AREA TARGETS AND INDICATORS

TARGET: To reduce improper use of toxic pesticides used by homeowners.

INDICATOR: The educational program delivered by volunteers trained by Cooperative Extension has resulted in direct reduction of Chlorpyrifos pesticide in effluent as measured and recorded by the Central Sanitary District.

TARGET: To reduce the amount of yard waste going into the landfill.

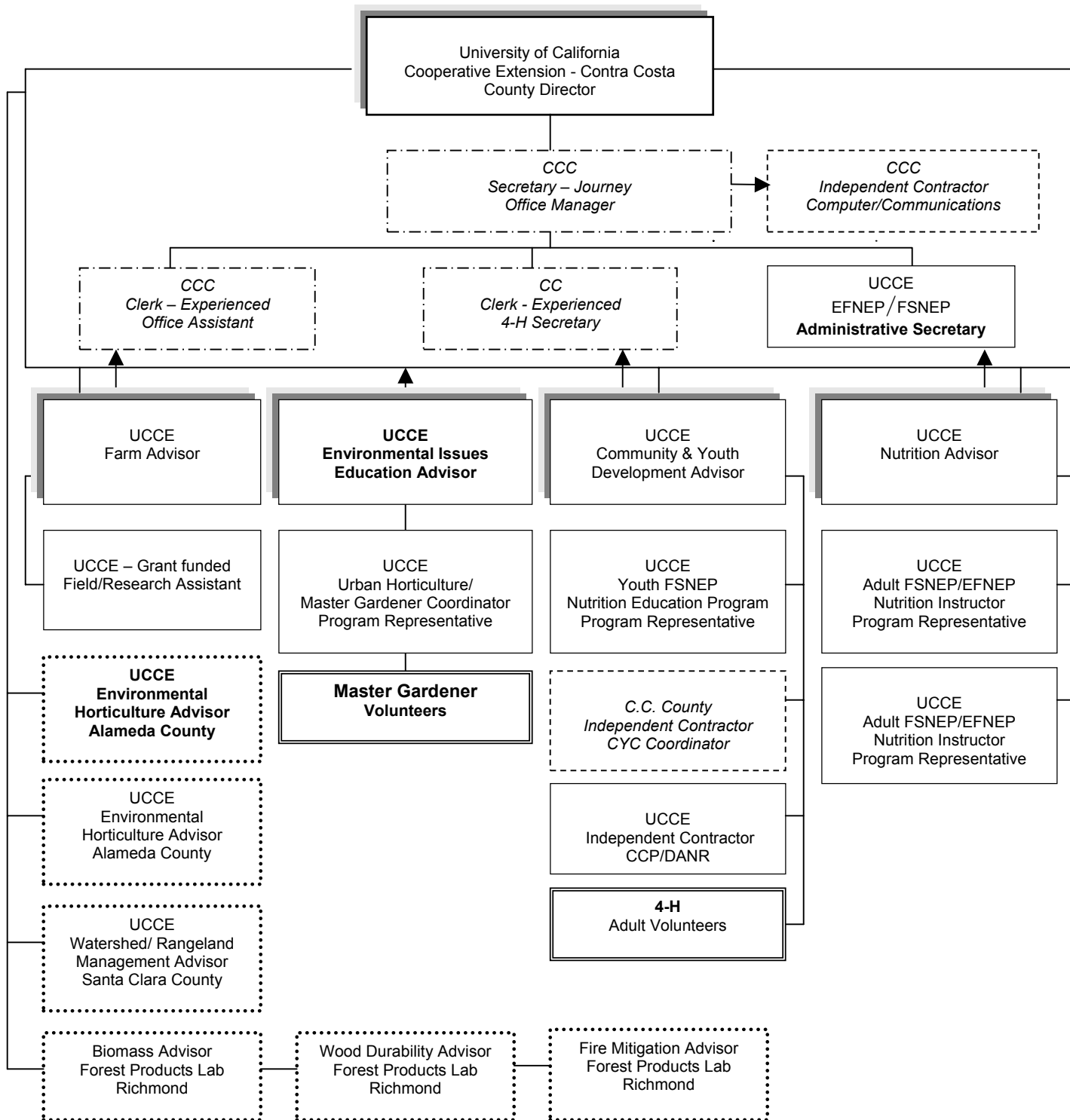
INDICATOR: The Yard Waste Diversion program of Central San, in cooperation with the Cooperative Extension, continues to divert hundreds of tons of yard waste from landfill. An estimated 367 tons of yard waste was diverted in 2001.

TARGET: To increase the Master Gardeners' knowledge about plant biotechnology.

INDICATOR: Ninety-six percent of the Master Gardeners attending a plant biotech session during the State Conference indicated they had a knowledge increase and were better able to find additional information.

BENEFIT TO THE PUBLIC:

The real value of Cooperative Extension is the return citizens receive by using non-biased, scientific research-based information in problem-solving. The skill of Cooperative Extension Advisors and Program Reps. to help citizens take scientific, research-based information and apply it to an actual problem results in the client being able to avoid or solve problems. Since 1914, Cooperative Extension has proven its value nationally to local people. Our Contra Costa County goals of increasing the % of participants that report a gain in knowledge and securing a positive change in behavior have been achieved.



KEY – Funding for research, programs and staff is provided by Federal, State, County and Grant sources. Staff persons indicated in the dash-lined boxes are Contra Costa County funded. UCCE Advisors in the dotted boxes are housed in adjoining counties but serve Contra Costa. Double-lined boxes are volunteers.